

C1  
division of application Serial No. 06/771,248, filed August 30,  
1985, now abandoned.

BACKGROUND OF THE INVENTION--.

IN THE CLAIMS:

Please cancel claim 12, without prejudice, and amend the  
following claim.

C2  
11. (Amended) A nucleic acid [nucleotide sequence] of  
Human Immunodeficiency Virus Type 1 (HIV-1), wherein the  
[nucleotide sequence] nucleic acid is free of particles of said  
virus and the [sequence] nucleic acid is encoded by a nucleotide  
sequence selected from the group consisting of:

(a) the sequence encoding ORF-Q comprising the  
following nucleotides:

4480	4490	4500	4510	4520	4530
TGC	CAAGAAGAAA	AGCAAAGATC	ATTAGGGATT	ATGGAAAACA	GATGGCAGGT
4540	4550	4560	4570	4580	
GATGATTGTG	TGGCAAGTAG	ACAGGATGAG	GATTAGAACA	TGGAAAAGTT	
4590	4600	4610	4620	4630	
TAGTAAAACA	CCATATGTAT	GTTTCAGGGA	AAGCTAGGGG	ATGGTTTTAT	
4640	4650	4660	4670	4680	
AGACATCACT	ATGAAAGCCC	TCATCCAAGA	ATAAGTTCAG	AAGTACACAT	
4690	4700	4710	4720	4730	
CCCACTAGGG	GATGOTAGAT	TGTAATAAC	AACATATTGG	GGTCTGCATA	
4740	4750	4760	4770	4780	
CAGGAGAAAG	AGACTGGCAT	CTGGGTCAGG	GAGTCTCCAT	AGAATGGAGG	
4790	4800	4810	4820	4830	
AAAAAGAGAT	ATAGCACACA	AGTAGACCCT	GAAC TAGCAG	ACCAACTAAT	
4840	4850	4860	4870	4880	
TCATCTGTAT	TACTTTGACT	GTTTTTCAGA	CTCTGCTATA	AGAAAGGCCT	

4890 TATTAGGACA	4900 TATAGTTAGC	4910 CCTAGGTGTG	4920 AATATCAAGC	4930 AGGACATAAC
4940 AAGGTAGGAT	4950 CTCTACAATA	4960 CTTGGCACTA	4970 GCAGCATTAA	4980 TAACACCAAA
4990 AAAGATAAAG	5000 CCACCTTTGC	5010 CTAGTGTTAC	5020 GAAACTGACA	5030 GAGGATAGAT
5040 GGAACAAGCC	5050 CCAGAAGACC	5060 AAGGGCCACA	5070 GAGGGAGCCA	5080 CACAATGAAT

GGACAC;

(b) the sequence encoding ORF-R comprising the following nucleotides:

8250 GA	8260 CAGGGCTTGG	8270 AAAGGATTTT	8280 GCTATAAGAT	8290 GGGTGGCAAG	8300 TGGTCAAAAA
8310 GTAGTGTGGT	8320 TGGATGGCCT	8330 ACTGTAAGGG	8340 AAAGAATGAG	8350 ACGAGCTGAG	
8360 CCAGCAGCAG	8370 ATGGGGTGGG	8380 AGCAGCATCT	8390 CGAGACCTGG	8400 AAAAACATGG	
8410 AGCAATCACA	8420 AGTAGCAATA	8430 CAGCAGCTAC	8440 CAATGCTGCT	8450 TGTGCCTGGC	
8460 TAGAAGCACA	8470 AGAGGAGGAG	8480 GAGGTGGGTT	8490 TTCCAGTCAC	8500 ACCTCAGGTA	
8510 CCTTTAAGAC	8520 CAATGACTTA	8530 CAAGGCAGCT	8540 GTAGATCTTA	8550 GCCACTTTTT	
8560 AAAAGAAAAG	8570 GGGGGACTGG	8580 AAGGGCTAAT	8590 TCACTCCCAA	8600 CGAAGACAAG	
8610 ATATCCTTGA	8620 TCTGTGGATC	8630 TACCACACAC	8640 AAGGCTACTT	8650 CCCTGATTGG	
8660 CAGAACTACA	8670 CACCAGGGCC	8680 AGGGGTCAGA	8690 TATCCACTGA	8700 CCTTTGGATG	
8710 GTGCTACAAG	8720 CTAGTACCAG	8730 TTGAGCCAGA	8740 TAAGGTAGAA	8750 GAGGCCAATA	
8760 AAGGAGAGAA	8770 CACCAGCTTG	8780 TTACACCCTG	8790 TGAGCCTGCA	8800 TGGAATGGAT	

8810 8820 8830 8840 8850  
GACCCTGAGA GAGAAGTGTT AGAGTGGAGG TTTGACAGCC GCCTAGCATT

8860 8870 8890 8900  
TCATCACGTG GCCCGAGAGC TGCATCCGGA GTACTTCAAG AACTGC;

(c) the sequence encoding ORF-1 comprising the following nucleotides:

5030 5040 5050 5060 5070 5080  
AT GGAACAAGCC CCAGAAGACC AAGGGCCACA GAGGGAGCCA CACAATGAAT

5090 5100 5110 5120 5130  
GGACACTAGA GCTTTTtagAG GAGCTTAAGA ATGAAGCTGT TAGACATTTT

5140 5150 5160 5170 5180  
CCTAGGATTT GGCTCCATGG CTTAGGGCAA CATATCTATG AAACCTTATGG

5190 5200 5210 5220 5230  
GGATACTTGG GCAGGAGTGG AAGCCATAAT AAGAATTCTG CAACAACCTGC

5240 5250 5260 5270 5280  
TGTTTATCCA TTTCAGAATT GGGTGTGAC ATAGCAGAAT AGGCGTTACT

5290 5300 5310  
CAACAGAGGA GAGCAAGAAA TGGAGCCAGT AGATCC;

(d) the sequence encoding ORF-2 comprising the following nucleotides:

5280 5290 5300 5310 5320  
GCGTTACT CAACAGAGGA GAGCAAGAAA TGGAGCCAGT AGATCCTAGA

5330 5340 5350 5360 5370  
CTAGAGCCCT GGAAGCATCC AGGAAGTCAG CCTAAACTG CTTGTACCAC

5380 5390 5400 5410 5420  
TTGCTATTGT AAAAAGTGTT GCTTTCATTG CCAAGTTTGT TTCACAACAA

5430 5440 5450 5460 5470  
AAGCCTTAGG CATCTCCTAT GGCAGGAAGA AGCGGAGACA GCGACGAAGA

5480 5490 5500 5510  
CCTCCTCAAG GCAGTCAGAC TCATCAAGTT TCTCTATCAA AGCAG;

(e) the sequence encoding ORF-3 comprising the following nucleotides:

5390 5400 5410 5420 5430  
AAAGTGTT GCTTTCATTG CCAAGTTTGT TTCACAACAA AAGCCTTAGG

5440 5450 5460 5470 5480  
CATCTCCTAT GGCAGGAAGA AGCGGAGACA GCGACGAAGA CCTCCTCAAG

5490 5500 5510 5520 5530  
GCAGTCAGAC TCATCAAGTT TCTCTATCAA AGCAGTAAGT AGTACATGTA

5540 5550 5560 5570 5580  
ATGCAACCTA TACAAATAGC AATAGCAGCA TTAGTAGTAG CAATAATAAT

5590 5600 5610  
AGCAATAGTT GTGTGGTCCA TAGTAATCAT AGAATA;

(f) the sequence encoding ORF-4 comprising the following nucleotides:

5520 5530 5540 5550 5560 5570  
GT AGTACATGTA ATGCAACCTA TACAAATAGC AATAGCAGCA TTAGTAGTAG

5580 5590 5600 5610 5620  
CAATAATAAT AGCAATAGTT GTGTGGTCCA TAGTAATCAT AGAATATAGG

5630 5640 5650 5660 5670  
AAAATATTAA GACAAAGAAA AATAGACAGG TTAATTGATA GACTAATAGA

5680 5690 5700 5710 5720  
AAGAGCAGAA GACAGTGGCA ATGAGAGTGA AGGAGAAATA TCAGCACTTG

5730 5740 5750 5760 5770  
TGGAGATGGG GGTGGAAATG GGGCACCATG CTCCTTGGGA TATTGATGAT CTG;

and

(g) the sequence encoding ORF-5 comprising the following nucleotides:

7970 7980 7990 8000 8010  
CACTT ATCTGGGACG ATCTGCGGAG CCTTGTGCCT CTCAGCTAC

8020 8030 8040 8050 8060  
CACCGCTTGA GAGACTTACT CTTGATTGTA ACGAGGATTG TGGAACCTCT

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